

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference P800958/WO/1	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/EP2004/013889	International filing date ( <i>day/month/year</i> ) 07 December 2004 (07.12.2004)	Priority date ( <i>day/month/year</i> ) 23 December 2003 (23.12.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant DAIMLERCHRYSLER AG		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).
  2. This REPORT consists of a total of 12 sheets, including this cover sheet.
- In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:
 

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input checked="" type="checkbox"/> Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/> Box No. VIII	Certain observations on the international application
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 29 August 2006 (29.08.2006)
Facsimile No. +41 22 338 82 70	Authorized officer <div style="text-align: center; font-weight: bold;">Yolaine Cussac</div> e-mail: pt11@wipo.int

# PATENT COOPERATION TREATY

TRANSLATION

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **See form PCT/ISA/210**

Applicant's or agent's file reference

**P800958/WO/1**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/EP2004/013889**

International filing date (day/month/year)

**07.12.2004**

Priority date (day/month/year)

**23.12.2003**

International Patent Classification (IPC) or both national classification and IPC

**G06F3/033, B60K37/06**

Applicant

**DAIMLERCHRYSLER AG**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

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Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language  
\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-20</u>	YES
	Claims	_____	NO
Inventive step (IS)	Claims	_____	YES
	Claims	<u>1-20</u>	NO
Industrial applicability (IA)	Claims	<u>1-20</u>	YES
	Claims	_____	NO

2. Citations and explanations:

1. Reference is made to the following documents:

D1: DE 197 52 056 A (BMW) 27 May 1999  
D2: EP 1 160 653 A (NOKIA) 5 December 2001\*  
D3: DE 296 04 717 U (Möller) 11 July 1996\*  
D4: EP 0 701 926 A (SIEMENS) 20 March 1996\*  
D5: DE 101 12 973 A (CAA) 10 February 2002\*  
D6: WO 03/036455 A (BARDARNEH) 01 May 2003  
D7: DE 100 56 307 A (VOLKSWAGEN) 29 May 2002\*

\* refers to a document which covers the general technical knowledge of a person skilled in the art.

2. The subject matter of claim 1 does not meet the requirements of PCT Article 33(3) for inventive step.

2.1 Document D1 (see, in particular, figures 1 and 2 and the associated text) discloses an operator control system for a vehicle (can be seen directly from figures 1 and 2), having the following features:

- a manual operating means (the rotary

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citations and explanations supporting such statement

knob/pushbutton/slider (not numbered), also see, for example, column 2, lines 8 to 10 and column 2, lines 29 to 38) with a plurality of degrees of freedom of adjustment for selecting and activating entries (can be seen directly from the two figures, the two previous passages and column 2, lines 49 to 52) in a menu structure with a plurality of menu levels (main menu in the peripheral area and submenu in the central area: see figure 2)

- a screen display means (column 1, lines 58 to 65; also see figures 1 and 2) having a plurality of display areas (column 1, line 64 to column 2, line 4: peripheral area 2 and central area 3) for displaying the menu structure (column 1, line 64 to column 2, line 4 and column 2, lines 18 to 25; can also be seen directly from figures 1 and 2), the display areas each comprising at least one field for displaying one of the entries (can be seen directly from the two figures)
- in at least one menu level (namely in the submenu which is associated with the main menu items displayed in the peripheral area), the entries ("Bayern 3", "B5 Aktuell", "Antenne", "Charivari" and "Klassik") are arranged in a list comprising a plurality of rows and one column (can be seen clearly in figure 2) in at least one display area (namely the central area 3), with just one entry being arranged in each of the rows (can be likewise clearly seen in figure 2), which can be selected by means of a cursor (column 2, lines 29 to 38; also

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see figure 2, where the cursor is positioned on the visually emphasized entry "Antenne" for the purpose of selecting the latter).

2.2. The subject matter of independent claim 1 differs from the teaching disclosed in D1 only in that

- the entries of the submenu are arranged in a matrix, with the entries being arranged such that, for the purpose of greater clarity (page 9, third section), in matrices which have more columns than rows, the entries are arranged in different rows in adjacent columns (see figure 3) or, in matrices which have more rows than columns, the entries are arranged in different columns in adjacent rows (see figure 3) and not in a one-dimensional list as in figure 2 of D1.

However, the problem of clearly arranging a large number of items of information which are to be graphically displayed is well known in the field of graphic user interfaces (also called "desktop clutter" in the technical field), and arranging selectable items of information in a matrix is a well known solution to this problem (see, for example, the matrix-like arrangement of the icons on the desktop of the Windows 2000 operating system which was known as early as 1999; also see document D2, figure 6 and sections 4, 7, 29, 32, 42 and 47, where, as implied by the above passages, it is clear that the mainly clear display of selectable elements

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by means of a matrix-like arrangement leads to a loss in clarity in the case of small display fields in matrices with a large number of elements, and this has to be avoided), with, for the purpose of displaying the selectable items of information (even) more clearly, said items of information being arranged in such a way that elements in adjacent rows are shown to the user in different columns, and elements in adjacent columns are shown to the user in different rows (can be clearly seen in figure 7I, with the three elements being arranged in three different positions next to one another and one beneath the other and one above the other, producing a 3x3 matrix), and the subject matter of independent claim 1 is therefore achieved, and said subject matter is therefore obvious.

2.3. By way of precaution, reference is made to the fact that the clear arrangement of elements is purely cognitive in nature (and therefore not technical within the meaning of PCT Rule 6.2(a)) and for this reason alone cannot contribute to an inventive step.

3. The subject matter of claims 2 to 20 does not meet the requirements of PCT Article 33(3) for inventive step.

3.1. The additional feature of claim 2 relates to the storage of vehicle settings (see, for example, D3, page 3, fourth section) or programs (see, for example, D4, column 4, lines 1 to 3) which has already long been known primarily in operator

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control systems of vehicles, with the display of this information in one- or two-dimensional lists being standard in the field of graphic user surfaces. The additional feature of claims 3 to 7 is widely known from scrollable lists which are provided with arrows (with the cursor moving to the adjacent element at least provided that it is not in the peripheral area) or from scrolling through the icons which are arranged in a circular fashion in the display of mobile telephones (with the cursor staying still and the icons moving on a curved path), and is obvious for two-dimensional lists for the reasons given in section 2 (see, for example, D5, figure 4c).

3.2. The additional feature of claims 8 to 11 relates to one of many possible ways of clearly arranging the entries (which is the objective of each graphic surface in any case, but especially in automobiles in view of the well-known problem of distracting the driver from the traffic situation as little as possible), which a person skilled in the art would choose without thereby being inventive. The additional feature of claims 9 and 12 relates to rotary knob/pushbutton/sliders (see, for example, D1, figures 1 and 2, or D5, figures 1 to 4) which are well known in the automobile industry.

3.3. The additional features of claims 10 and 13 relate to leaving a relatively low hierarchical level by deflecting a rotary/pushbutton/sliding element in a vertical direction or a direction which is not used,



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as is well known, in order to align the entries (see document D6, figure 18b and associated text on page 14, lines 10 to 13). The additional feature of claim 14 is known from D7 (column 3, section 18, lines 28 to 42).

3.4. The additional feature of claim 15 relates to the well-known visual emphasis of a selected entry in graphic user surfaces. The additional feature of claims 17 and 18 relates to one of many possible ways of defining the width of a switching area as a function of the space available and/or function identification, in which a person skilled in the art would make a selection which he believes is appropriate, without thereby being inventive.

3.5 The additional features of claims 19 and 20 are known from D1 (see figure 2), with storage of programs in automobiles being a practice which has long been known.

4. Current claims 1 to 20 are not admissible for the reasons given in sections 2 and 3. In view of the available prior art, it is also not possible to see how part of the application could form the basis for a new, admissible claim. A negative IPER is therefore anticipated.

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

1. Contrary to PCT Rule 5.1(a)(ii), the description does not cite documents D1 to D6 or even at least briefly outline the relevant prior art disclosed therein.
2. Contrary to PCT Rule 6.3(b), independent claim 1 has not been drafted in the two-part form - which is appropriate in the present case - in which features known in combination from the prior art (see D1 and D2) are included in the preamble of the claim (PCT Rule 6.3(b)(i)) and the remaining features are included in the characterising part of the claim (PCT Rule 6.3(b)(ii)).

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Box No. VIII      Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. In claim 1, the expression "with just one entry (E1 to E5, E1 to E9) being arranged in each of the columns (S1 to S5) or in each of the rows (Z1 to Z9)" also permits arrangements in which all of the entries are arranged one beneath the other in *different* rows in one column or next to one another in *different* columns in one row. However, the description (see page 9 and figure 3, and pages 12 and 13, and figure 4) discloses only arrangements of the type in which, for matrices which have more columns than rows, the entries are arranged in *different* rows of *adjacent* columns (*that is to say not in one column*) (see figure 3), and, in matrices which have more rows than columns, the entries are arranged in *different* columns of *adjacent* rows (*that is to say not in one row*). Claim 1 is therefore not supported by the description (PCT Article 6) and therefore has to be changed in the sense of the above expression.
2. In claim 3, the expression "virtually *endless* treadmill" suggests that it is a list which moves automatically in a circular fashion and in which the first element is automatically displayed again with the cursor positioned on it after the cursor reaches the last element. However, with regard to the description (see, for example, page 4, last section; page 10, second section; page 13, second section ...), it can be seen that it is a (two-dimensional) scrollable list which has more entries than can be

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Box No. VIII      Certain observations on the international application

displayed in the area provided for this purpose, and this is displayed to the user by corresponding arrows. This should be expressed clearly using corresponding wording.

The same objections apply, *mutatis mutandis*, to claims 9 and 12.